

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 7, line 26, with the following rewritten paragraph:

~~According to claim 1 there~~ There is provided a transcoding apparatus for use in a switching network (comprising at least one MSC with associated network nodes such as BSCs, BTSs and/or TCME heads) of a telecommunication system such as a mobile radio communication system, said transcoding apparatus including (a) a plurality of TRAUs for source encoding and decoding data, for example speech data, wherein at least one TRAU of said plurality is capable of operating in TFO mode (i.e. is a TFO-TRAU as defined above with respect to the prior art), (b) switching means adapted to switch data through said plurality of TRAUs, (c) a transcoder controller for controlling said switching means and said plurality of TRAUs, wherein said transcoder controller is adapted to (d) instruct said switching means to insert one of said at least one TRAU into a data path associated with a connection (call, e.g.) between a mobile terminal of said telecommunication system and said switching network, and wherein said transcoder controller is adapted to (e) instruct said one of said at least one TRAU to operate in TFO mode, and wherein said transcoder controller is adapted to (f) instruct, during said connection, said switching means to eliminate said one of said at least TRAU from said data path. In other words, the transcoder controller is able to take the actions necessary in order to remove the allocated TFO-TRAU from the data path associated with an established TFO-connection between a mobile terminal and, say, the MSC of said switching network (and, of course, further to the call destination). This allows for a TRAU-free operation of said connection. Considering the transcoding apparatus as a whole, the number of TRAUs in said plurality can thus be reduced resulting in a reduced hardware required for transcoding purposes.

Please replace the paragraph beginning at page 8, line 21, with the following rewritten paragraph:

~~Preferably, according to claim 2, the~~ The transcoding apparatus further includes a plurality of TCME units for performing TFO-specific circuit multiplication operations, wherein said transcoder controller is adapted to instruct said switching means to insert one of said plurality of TCME units into said data path, and wherein said transcoder controller is adapted to instruct, during said connection, said switching means to eliminate said one of said plurality of TCME units from said data path. In other words, the transcoder controller is able to take the actions necessary in order to remove the allocated TCME unit from the data path associated with an established TFO-connection between a mobile terminal and, say, the MSC of said switching network (and, of course, further to the call destination). This allows for a TCME-free operation of said connection. Considering the transcoding apparatus as a whole, the number of TCME units in said plurality can thus be reduced resulting in a reduced hardware required for circuit multiplication purposes.

Please replace the paragraph beginning at page 9, line 3, with the following rewritten paragraph:

~~Advantageously, according to claims 3 and 5, the~~ The transcoder controller is adapted to determine (obtain knowledge about the question) whether or not (and when) a switching controller (in the MSC, e.g.) of said switching network intends to add (or is adding) supplementary services (as explained above with respect to the prior art) during said connection. It is further adapted to instruct, during said connection, said switching means to eliminate said one of said at least one TRAU and/or said one of said plurality of TCME units from said data path, if said switching controller does not intend to add (or is not adding) supplementary services. In other words, the transcoder controller is able to take the actions necessary in order to remove the allocated TRAU and/or the allocated TCME unit from the data path associated with said established TFO-connection, if (and whenever) the switching controller does not intend to add (or is not currently adding) supplementary services to said connection (or equivalently, if and whenever the switching controller of the MSC is transparently through-connecting the call). This allows for a TRAU-free and/or TCME-free operation of said connection during periods in which no supplementary services are added.

Please replace the paragraph beginning at page 9, line 26, with the following rewritten paragraph:

~~Preferably, according to claims 7 to 11, the~~ The transcoder controller is adapted to determine, based on an evaluation of locally available information, whether or not a switching controller of said switching network intends to add supplementary services during said connection. Examples for such locally available information are (a) results of a supervision of inputs and outputs of said transcoding apparatus (claim 8), (b) results of a supervision of reports from said one of said at least one TRAU and/or from said one of said plurality of TCME units, i.e. from the allocated TRAU and/or the allocated TCME unit (claim 9), and (c) information received from said switching controller (claim 10) such as port address information (claim 11). The features of claims 7 to 11 thus advantageously allow for a minimization of the signalling effort required for the reduction in hardware, because only locally available information, i.e. information which is available (or can be derived) in the transcoding apparatus (and/or the TCME head) or the associated MSC, is used.

Please replace the paragraph beginning at page 10, line 9, with the following rewritten paragraph:

~~According to claim 14 there is provided a~~ A TCME head apparatus is provided for use in a switching network (comprising at least one MSC with associated network nodes such as BSCs, BTSs and/or transcoding apparatus) of a telecommunication system such as a mobile radio communication system, said TCME head apparatus including (a) a plurality of TCME units for performing TFO-specific circuit multiplication operations, (b) switching means adapted to switch data through said plurality of TCME units, and (c) a TCME head controller for controlling said switching means and said plurality of TCME units, wherein said TCME head controller is adapted to (d) instruct said switching means to insert one of said plurality of TCME units into a data path associated with a connection (call, e.g.) between a mobile terminal of said telecommunication system and said switching network, and wherein said TCME head controller is adapted to (e) instruct, during said connection, said switching means to eliminate said one of said plurality of TCME units from said data path. In other words,

the TCME head controller is able to take the actions necessary in order to remove the allocated TCME unit from the data path associated with an established TFO-connection between a mobile terminal and, say, the MSC of said switching network (and, of course, further to the call destination). This allows for a TCME-free operation of said connection. Considering the TCME head apparatus as a whole, the number of TCME units in said plurality can thus be reduced resulting in a reduced hardware required for circuit multiplication purposes.

Please replace the paragraph beginning at page 10, line 37, with the following rewritten paragraph:

~~Advantageously, according to claim 15, the~~ The TCME head controller is adapted to determine (obtain knowledge about the question) whether or not (and when) a switching controller (in the MSC, e.g.) of said switching network intends to add (or is adding) supplementary services (as explained above with respect to the prior art) during said connection. It is further adapted to instruct, during said connection, said switching means to eliminate said one of said plurality of TCME units from said data path, if said switching controller does not intend to add (or is not adding) supplementary services. In other words, the TCME head controller is able to take the actions necessary in order to remove the allocated TCME unit from the data path associated with said established TFO-connection, if (and whenever) the switching controller does not intend to add (or is not currently adding) supplementary services to said connection (or equivalently, if and whenever the switching controller of the MSC is transparently through-connecting the call). This allows for a TCME-free operation of said connection during periods in which no supplementary services are added.

Please replace the paragraph beginning at page 11, line 21, with the following rewritten paragraph:

~~Preferably, according to claim 17, the~~ The TCME head controller is adapted to determine, based on an evaluation of locally available information, whether or not a switching controller of said switching network intends to add supplementary services during said connection. Examples for such locally available information are (a)

results of a supervision of inputs and outputs of said TCME head apparatus, (b) results of a supervision of reports from said one of said plurality of TCME units, i.e. from the allocated TCME unit, and (c) information received from said switching controller such as port address information. These features thus advantageously allow for a minimization of the signalling effort required for the reduction in hardware, because only locally available information, i.e. information which is available (or can be derived) in the TCME head apparatus or the associated MSC or transcoding apparatus, is used.